urease test from one minute to one hour reading of the results. A serological test was carried out as well with a serum from all f the 108 patients.
Results: Using culture and or histology as a gold standard we found *H. pylori* in 93 (86%) of the patients with 100% of isolation in patients with MALT lymphoma. The sensitivity, specificity predictive positive value, predictive negative value and diagnostic accuracy of the tests were as follows; rapid disk urease test – 93%; 100%; 100%; 82%; and 94.3%; histology – 81.1%; 100%; 100%; 70%; and 82.5%; culture – 76.9%; 100%; 100%; 75%; and 78.6%; and serology – 82.2%; 88.2%; 100%; 57%; and 66.8%.
Conclusion: Our results show an extremely high percentage of isolation of *H. pylori* immunocompromised patients, especially in MALT lymphomas. We conclude also that the rapid disk urease test is a quick and inexpensive method with a good sensitivity, specificity and accuracy for detection of *H. pylori* infections.

Antibiotic utilization for pediatric inpatients: retrospective study in Department of Pediatrics, University of Padua

*E. M. Ruga, F. Fregonese, P. Facchin, R. D'Elia, Department of Pediatrics, University of Padua**

Introduction: Antibiotic resistance among common pathogenic bacteria in communities has been identified as an emerging threat to public health. Surveillance programs are useful to reduce the spreading of these pathogens. In order to arrange antibiotic policies detailed knowledge of prescribing patterns both in in- and out-patients is necessary.
Objective: This study aims to analyze the use of antimicrobials in inpatient children admitted to our department in Padua. We evaluated antimicrobial use including patients' characteristics, type of antimicrobial, the route of administration.
Methods: In this retrospective study all inpatients recovered during January 1999 were analyzed. All pediatric services were considered, both internistic (general pediatric, oncohematology, nephrology, neonatal pathology, intensive care unit) surgical (pediatric surgery) and emergency. We collected information from patients records, with regard to antibiotic prescription (generic class, dose, duration, route).
Results: A total of 426 patients were admitted in the study, among them 218 (52%) had at least one antibiotic prescription. 95% of oncohematology patients received antibiotics, 85% of those in the intensive care unit and 66% of nephrologic inpatients including transplanted patients. On the other side only 20% of emergency patients and 33% of general pediatric inpatients received antibiotics. The most prescribed antibiotic classes were cephalosporins III generation (20%), aminopenicillins (15%) and aminoglycosides (14%). The route of administration most used was i.v. (68% of all prescriptions), especially for patients of intensive care unit (88%) and the neonatal service (91%). Only one antibiotic course was prescribed in 60% of cases, while two or more were given in 40%. The therapy was administered for a longer period in the oncohematology (median length of therapy 7 days) and intensive care units (5 days).
Discussion: In this study, similarly to studies found in literature, a high percentage of inpatients (1:2) received antibiotics, especially broad spectrum drugs. The large use of these drugs, is explained by the type of patients considered: patients with a high risk of infections, frequently in oncohematology or in intensive care units. Anyway antibiotics were used also in infants with high respiratory tract-infections, without a documented bacterial etiology.

INFECTIONS IN ORGAN TRANSPLANT PATIENTS

Intense cytomegalovirus (CMV) prophylaxis reduces rejection in orthotopic liver transplantation (OLT)

Richard Freeman, Michelle Slifkin, Robin Ruthazer, Abigail Mithoefer, Mike Angelis, Richard Rohrer, Dan Pratt, David R. Snydman
Transplant/Infectious Diseases, New England Medical Center Boston, MA USA*

Background: CMV disease has been shown to be an independent predictor of rejection in OLT. However, prevention of CMV disease through use of intense CMV prophylaxis has not been demonstrated to reduce rates of rejection in liver transplantation.
Methods: We undertook an analysis to examine the impact of intense CMV prophylaxis on rates of biopsy proven rejection comparing two eras comprising 191 consecutive OLT recipients. In the 1994–96 cohort, two weeks of IV ganciclovir plus CMV immune globulin (CMVIG) was primary prophylaxis for high risk (CMV seropositive donor) patients all others received high dose acyclovir; in the 1997–99 cohort, all OLT recipients received 3 months of oral ganciclovir and CMVIG was added for high risk patients. Retrospective review of prospectively collected data was analyzed using survival analysis and Cox proportional hazard models.
Results: Comparison of both cohorts showed significant reductions of mortality (12% versus 3.3% at one year, $p=0.04$), rejection (63% versus 43%, $p<0.01$) and CMV disease (19% vs. 3.3%, $p<0.01$) in comparing the 1994–6 to the 1997–1999 cohorts, respectively. In a multivariate analysis of risk factors for biopsy proven rejection, absence of ganciclovir prophylaxis (Relative Risk (RR): 1.83, 95% CI 1.17 to 2.85, $p<0.01$), bacteremia (RR: 2.57, 95% CI 1.57 to 4.22, $p<0.01$), initial immunosuppression which was cyclosporine based (RR: 1.98, 95% CI 1.26 to 3.11, $p<0.01$), and biliary anastomosis using a choledochojejunostomy (RR: 1.67, 95% CI 0.99 to